

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Withdrawn—Currently Amended) ~~A method for treating Alzheimer's disease (AD), comprising:~~

~~stimulating sphenopalatine ganglion (SPG) related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and~~

~~configuring the stimulation~~

The method according to claim 178, wherein configuring comprises configuring the electrical current so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from a brain of the subject to a systemic blood circulation of the subject, so as to treat the AD.

2-4. (Canceled)

5. (Withdrawn—Currently Amended) The method according to claim 1, wherein ~~stimulating~~ applying the electrical signal to the SPG-related tissue comprises directly ~~stimulating~~ applying the electrical signal to the SPG.

6. (Withdrawn) The method according to claim 1, wherein the AD-related constituent includes an inflammatory-related constituent, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the inflammatory-related constituent.

7-9. (Canceled)

10. (Withdrawn) The method according to claim 1, wherein the AD-related constituent includes a DNA fragment, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the DNA fragment.

11. (Withdrawn) The method according to claim 1, wherein the AD-related constituent includes an RNA fragment, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the RNA fragment.

12. (Withdrawn) The method according to claim 1, wherein the AD-related constituent includes a cytokine, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the cytokine.

13. (Withdrawn) The method according to claim 1, wherein the AD-related constituent includes a marker of neuronal death or degeneration, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the marker.

14. (Withdrawn) The method according to claim 1, wherein the AD-related constituent includes a marker of an inflammatory process, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the marker.

15-18. (Canceled)

19. (Withdrawn—Currently Amended) ~~A method for treating Alzheimer's disease (AD), comprising:~~ The method according to claim 178, and comprising supplying a pharmaceutical agent to a systemic blood circulation of the subject, a subject;

~~stimulating sphenopalatine ganglion (SPG) related tissue of the subject by applying an electrical signal to the SPG related tissue, the SPG related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and~~

~~configuring the stimulation~~ wherein configuring comprises configuring the electrical signal so as to cause an increase in passage of the pharmaceutical agent from the systemic blood circulation into a central nervous system (CNS) of the subject, so as to treat the AD.

20. (Withdrawn—Currently Amended) The method according to claim 19, wherein ~~stimulating~~ applying the electrical signal to the SPG-related tissue comprises directly ~~stimulating~~ applying the electrical signal to the SPG.

21-22. (Canceled)

23. (Withdrawn) The method according to claim 19, wherein the pharmaceutical agent includes a glutamate receptor antagonist, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the glutamate receptor antagonist.

24. (Withdrawn) The method according to claim 19, wherein the pharmaceutical agent includes an NMDA receptor blocker, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the NMDA receptor blocker.

25-26. (Canceled)

27. (Withdrawn) The method according to claim 19, wherein the pharmaceutical agent includes a stimulant of nerve regeneration, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the stimulant.

28-29. (Canceled)

30. (Withdrawn) The method according to claim 19, wherein the pharmaceutical agent includes a microglial activation modulator, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the microglial activation modulator.

31. (Withdrawn) The method according to claim 19, wherein the pharmaceutical agent includes an antioxidant, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the antioxidant.

32. (Canceled)

33. (Withdrawn) The method according to claim 19, wherein the pharmaceutical agent includes an inhibitor of protein tyrosine phosphatases, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the inhibitor.

34. (Withdrawn) The method according to any one of claim 19, wherein the pharmaceutical agent includes a medium chain triglyceride, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the medium chain triglyceride.

35-39. (Canceled)

40. (Withdrawn) The method according to claim 19, wherein the pharmaceutical agent is selected from the list consisting of: an AD vaccine, a component of an AD vaccine, and a derivative of an AD vaccine, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent.

41-46. (Canceled)

47. (Currently Amended) ~~A method for treating Alzheimer's disease (AD), comprising:~~

~~stimulating sphenopalatine ganglion (SPG)-related tissue of the subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and~~

~~configuring the stimulation~~ The method according to claim 178, wherein configuring comprises configuring the electrical signal so as to cause an increase in cerebral blood flow (CBF) of the subject, so as to treat the AD.

48. (Currently Amended) The method according to claim 47, wherein ~~stimulating~~ applying the electrical signal to the SPG-related tissue comprises directly ~~stimulating~~ applying the electrical signal to the SPG.

49-177. (Canceled)

178. (New) A method comprising:

applying an electrical signal to sphenopalatine ganglion (SPG)-related tissue of a subject suffering from Alzheimer's disease (AD), the SPG-related tissue selected from the group consisting of: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

treating the AD by configuring the electrical signal to stimulate the SPG-related tissue.

179. (New) The method according to claim 178, wherein configuring the electrical signal comprises configuring the electrical signal to induce parasympathetic activation of the SPG-related tissue.

180. (New) The method according to claim 178, wherein applying the electrical signal comprises applying the electrical signal to the SPG.

181. (New) The method according to claim 178, wherein applying the electrical signal comprises applying the electrical signal to the nerve fibers which are directly anatomically connected to the SPG.

182. (New) The method according to claim 178, wherein applying the electrical signal comprises applying long-term stimulation to the SPG-related tissue.

183. (New) The method according to claim 182, wherein applying the long-term stimulation comprises applying long-term intermittent stimulation to the SPG-related tissue.

184. (New) The method according to claim 178, wherein applying the electrical signal comprises implanting an electrical stimulator in a nasal cavity of the subject, and applying the electrical signal using the stimulator.